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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,954	12/13/2001	Kai Narvanen	324-010672-US(PAR)	2696
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PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			EXAMINER MURPHY, RHONDA L	
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			10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/021,954

Applicant(s)

NARVANEN ET AL.

Examiner

Rhonda Murphy

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on 7/18/07.

Accordingly, claims 12-20 have been added and claims 1-20 are currently pending in this application.

Response to Arguments

1. Applicant's arguments filed 7/18/07 have been fully considered but they are not persuasive. Applicant argues Sayers fails to disclose detection of an internal call. However, Examiner respectfully disagrees and would like to direct the applicant to column 11, lines 4-14 which inherently detects the establishment of data connection since the gateway permits access to network and translates called numbers and routing of calls. A call must be detected in order for the gateway to permit access to the network and perform translations and routing functions. Applicant further argues "only voice, not data calls are disclosed. However, Examiner disagrees. Sayer teaches voice and data traffic through the network in column 11, lines 40-43.
2. Examiner indicated Sayer teaches transcoding frames that allow the voice and data traffic to be sent to existing networks. Applicant requests Examiner to provide a reference disclosing TRAU frames adapting to RTP frames. Examiner would like to direct the applicant to the rejection of claim 1 below and Lohn reference.
3. Applicant argues Muysewinkel fails to disclose two data rate adaptations. However, Examiner respectfully disagrees. Muysewinkel discloses a TRAU used to

Art Unit: 2616

match the transmission rate – 16 kbit/s used in the radio subsystem and radio interface, and the transmission rate – 64 kbit/s processed in the MSC to another in both directions (uplink and downlink).

Claim Objections

1. Claims 1 and 12 are objected to because of the following informalities:
2. In claim 1, line 9, it is suggested to spell-out the acronym "GSM".
3. In claim 1, line 10, it is suggested to spell-out the acronym "TRAU".
4. In claim 1, line 10, it is suggested to spell-out the acronym "RTP".
5. In claim 1, line 21, "being further to route" should be rephrased.
6. In claim 12, line 7, "form" should be replaced with "from".
7. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 2616

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1 – 7, 9 – 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayers et al. (US 6,539,237) in view of Lohn, III (US H1940 H) and Muysewinkel et al. (US 7,047,013).

Regarding claim 1, Sayers teaches a system (Fig. 2), which comprises an office network (22) and an operator network (29) and a local area network (24) between them, wherein the office network comprises:

- at least one mobile system terminal (mobile 4),

- a base transceiver station (P-BTS 27),

- a radio access gateway (gateway 42) controlling the base transceiver station and having a functional connection with the local area network (col. 11, lines 4-18), the radio access gateway comprising a traffic handler functionality to detect the establishment of an internal data connection in the office network (col. 11, lines 4-14; inherently detects establishment of data connection since the gateway permits access to network and translates called numbers and routing of calls), which data connection uses a GSM protocol (col. 9, lines 54-58) to transcode frames of said mobile system to frames to be used in the local area network (col. 11, lines 39-43),

- a call control entity (P-BTS 27), to control said radio access gateway through a signalling connection on the basis of information about detection of the establishment of

Art Unit: 2616

the internal data connection, received from said traffic handler functionality (col. 10, lines 66-67; col. 11, lines 1-18);

a data call interworking function, to which a signalling connection from said call control entity is arranged (col. 10, lines 66-67; col. 11, lines 1-2 and 59-67; further described in col. 12, lines 3-5 and 21-29) and which data call interworking function is adapt the frames coming from the radio access gateway (col. 11, lines 39-43; transcoding function) to the data protocol according to said office network (col. 11, lines 39-43), in response to the call control entity informing of the establishment of an internal GSM data connection in the office network (col. 12, lines 21-29), at least the second party of the data connection being a GSM terminal (Fig. 2; col. 10, lines 15-24), the data call interworking function being further to route the GSM data connections to their destination address in the office network (col. 9, lines 54-58; col. 10, lines 15-24); and the operator network (29) is to adapt data transmission between the office network and a public land mobile network together (col. 9, lines 34-45).

Sayers fails to explicitly disclose adapting TRAU frames to RTP frames, but does disclose transcoding frames that allow the voice and data traffic to be sent to existing networks and establishing a RTP/RTCP transport link (col. 22, lines 25-27).

However, Lohn teaches adapting TRAU frames to RTP frames (col. 10 lines 41-53).

In view of this, it would have been obvious to one skilled in the art to modify Sayer's system with Lohn's teaching of adapting TRAU frames to RTP frames, in order to transport voice and data traffic to other networks.

Although Sayers discloses adapting frames, via transcoding functions (col. 11, lines 40-42), Sayers fails to explicitly disclose adapting frames through at least two data rate adaptations.

However, Muysewinkel discloses adapting frames through at least two data rate adaptations (col. 4, lines 64-67; col. 5, lines 1-4; a TRAU used to match the transmission rate – 16 kbit/s used in the radio subsystem and radio interface, and the transmission rate – 64 kbit/s processed in the MSC to another in both directions (uplink and downlink).

In view of this, it would have been obvious to one skilled in the art to include data rate adaptations, for the purpose of matching system transmission rates.

Regarding claim 2, Sayers teaches a location database (HLR) for registering terminals belonging to the office network and for managing location and subscriber information (col. 5, lines 1-12), and in response to a data connection establishment request made by the terminal (col. 10, lines 66-67; col. 11, lines 1-18), the call control entity is to authenticate the subscriber of the terminal and alternatively: to direct the radio access gateway to route the data connection to said data call interworking function in response to said subscriber of the terminal being registered into the office network, or to direct the radio access gateway to route the data connection through the operator network to a switching centre of the public land mobile network in response to the fact that the subscriber of the terminal is not registered into the office network (col. 18, lines 52-67).

Regarding claim 3, Sayers teaches an office-specific base transceiver station, radio access gateway and data call interworking function (Fig. 2), but fails to explicitly

Art Unit: 2616

disclose the base transceiver station, radio access gateway and data call interworking function implemented as one element of the telecommunications system.

However, it would have been obvious to one skilled in the art to combine the three elements into one element, so as to consolidate multiple elements into a single element or hardware structure.

Regarding claim 4, Sayers teaches a radio access gateway, data call interworking function and office-specific base transceiver stations, but fails to explicitly disclose said radio access gateway and data call interworking function implemented as one element of the telecommunications system in such a manner that the element is to control one or more office-specific base transceiver stations.

However, it would have been obvious to one skilled in the art to combine the radio access gateway and data call interworking function into one element, so as to consolidate multiple elements into a single element or hardware structure.

Regarding claim 5, Sayers teaches an office-specific base transceiver station (Fig. 2, 27) and a radio access gateway (42) as separate elements of the telecommunication system in such a manner that the radio access gateway is to control one or more office-specific base transceiver stations (col. 10, lines 66-67; col. 11, lines 1-18).

Sayers fails to explicitly disclose an office-specific base transceiver station and data call interworking function implemented as separate elements of the telecommunication system.

However, it would have been obvious to one skilled in the art to separate the base transceiver stations and data call interworking function into separate elements, so as to divide the elements and functionality into distinct units.

Regarding claim 6, Sayers teaches said data protocol of the office network is a H.323 protocol (col. 11, lines 5-7).

Regarding claim 7, Sayers teaches a remote access server (server 25) to function as an interface between the office network and the local area network (see Fig. 2), and the data call interworking function is to transmit user data adapted to frames according to the data protocol of the office network to the remote access server (col. 10, lines 15-24).

Regarding claim 9, Sayers teaches a terminal (mobile 4) registered into the office network (22) to establish a data connection to said remote access server (25) from outside said office network as a virtual private network (VPN) connection (col. 24, lines 25-48).

Regarding claim 10, Sayers teaches the same limitations described above in the rejection of claim 1.

Regarding claim 11, Sayers teaches the same limitations described above in the rejection of claim 2.

Regarding claims 12-18 and 20, Sayers teaches the same limitations described above in the rejection of claims 1-7 and 9, respectively.

11. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayers et al. (US 6,539,237) in view of Lohn, III (US H1940 H) and Muysewinkel et al.

Art Unit: 2616

(US 7,047,013) as applied to claims 7 and 18 above, and further in view of Jiang et al. (US 7,136,631).

Regarding claims 8 and 19, Sayers teaches a terminal (mobile 4) registered into the office network (22) to establish a data connection to said remote access server (25) from outside said office network (see. Fig. 2).

Sayers fails to explicitly disclose the data connection as a dial-up connection.

However, Jiang discloses a dial-up connection (col. 12, lines 7-10).

In view of this, it would have been obvious to one skilled in the art to use a dial-up connection as the data connection, so as to provide communication by using a dial-up method.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

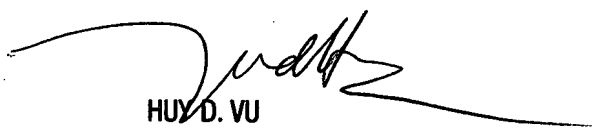
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
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RM


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